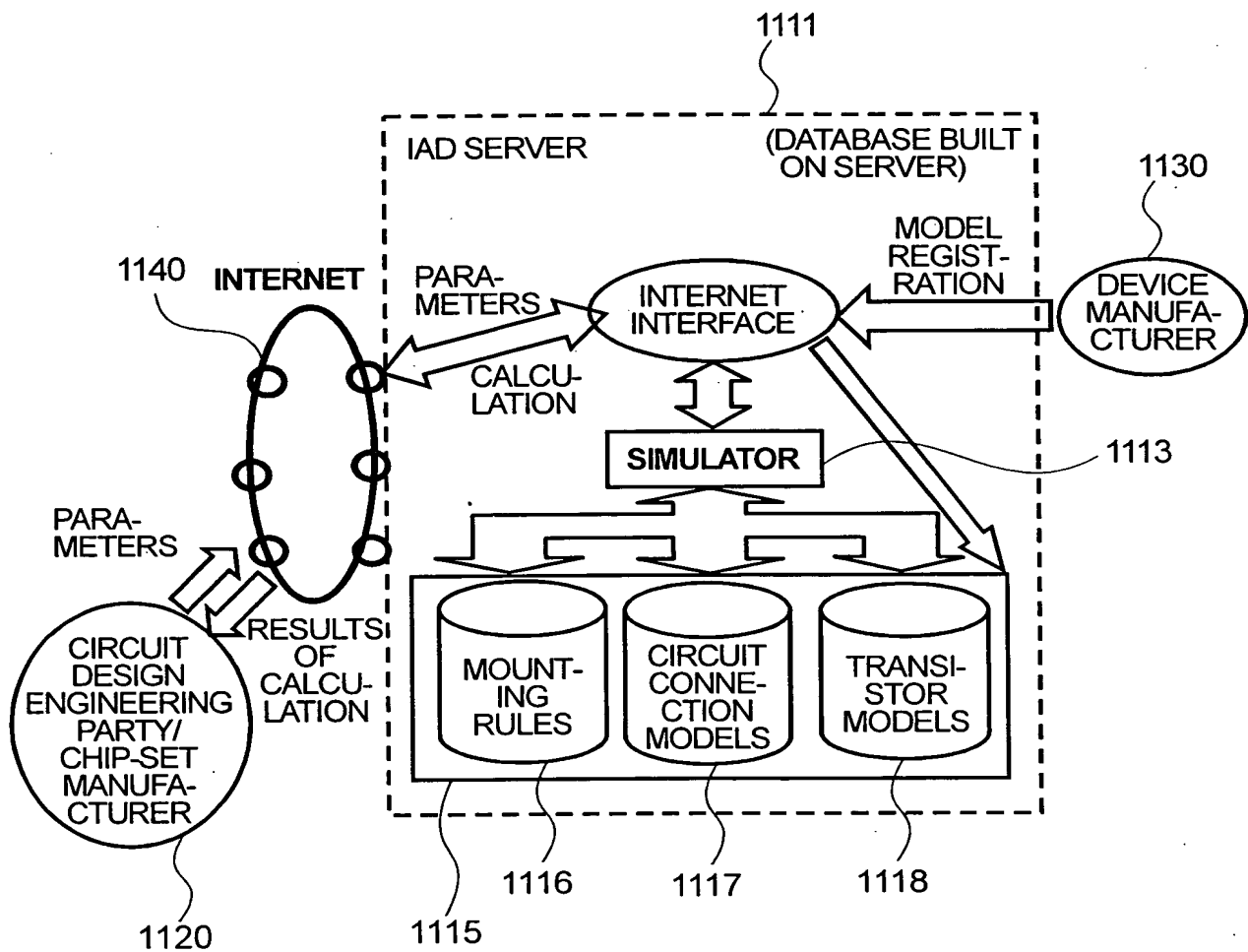


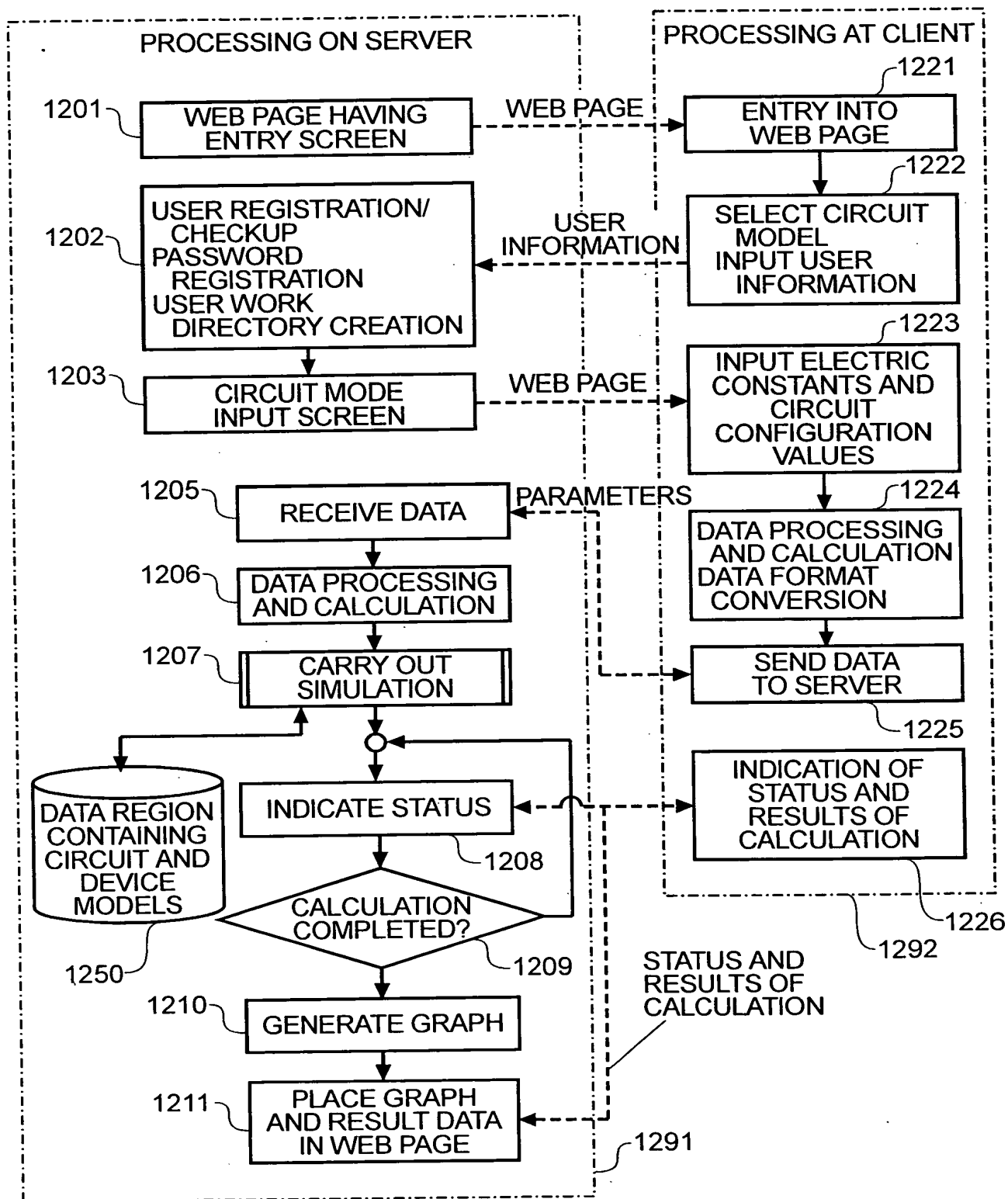
**FIG.1**

**SYSTEM CONFIGURATION**



# FIG.2

## SYSTEM OPERATION FLOWCHART



09987841 111504

## FIG.3

EXAMPLE OF ENTRY SCREEN

### *Welcome to Web PCB Simulation*

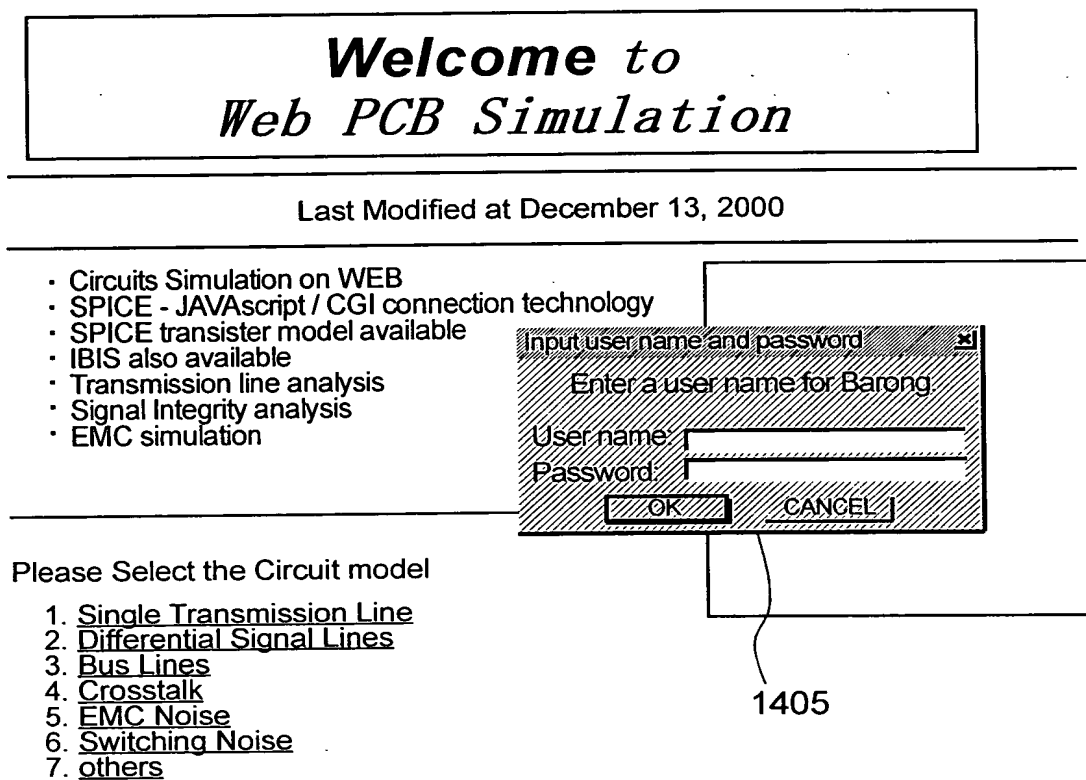
Last Modified at December 13, 2000

- Circuits Simulation on WEB
- SPICE - JAVAscript / CGI connection technology
- SPICE transistor model available
- IBIS also available
- Transmission line analysis
- Signal Integrity analysis
- EMC simulation

Please Select the Circuit model

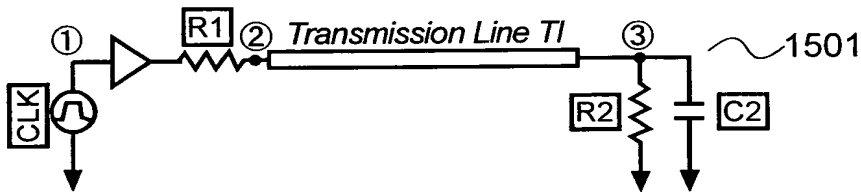
1. Single Transmission Line
2. Differential Signal Lines
3. Bus Lines
4. Crosstalk
5. EMC Noise
6. Switching Noise
7. others

## EXAMPLE OF USER REGISTRATION



**FIG.5**  
EXAMPLE OF CIRCUIT  
PARAMETER INPUT SCREEN

Web SPICE - Spider -

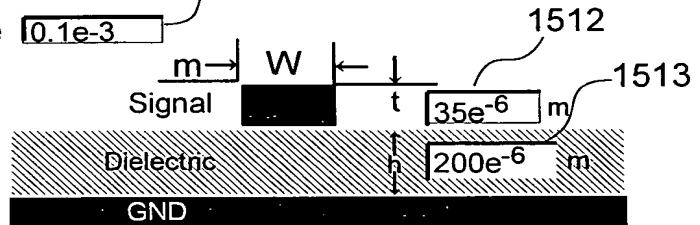


Set the parameters below.

- Clock **CLK**  MHz ~ 1502
- Transeiver **TX**  ~ 1503
- Resistor **R1**   $\Omega$  ~ 1504
- Resistor **R2**   $\Omega$  ~ 1505
- Capasotpr **C2**  F ~ 1506
- Transmission Line

Line Type : ☒ Microstrip Line  ~ 1511

Line length  mm ~ 1516



Dielectric Constant  $\epsilon_r$   ~ 1514  
Permeability  $\mu_r$   ~ 1515

GO!(SPICE) ~ 1520

1500

T09977-1150

## FIG.6

### EXAMPLE OF CALCULATION STATUS SCREEN

SPICE extractor VIA WEB

---

#### STATUS

```
@ ##### @  
@ ## Web-SPICE / WS START : SHELL VERSION = V02-05-01 ## @  
@ ##### @
```

```
@ # circuit : [ spice1.alc ]  
@ # list    : [ spice1.lst ]
```

ALCG50I: SPICE/WS START  
ALCG51I: SPICE/WS NORMALLY ENDED

ALCG40I: EXECUTION LIST OUTPUT TO spice1.lst

SPICE wave file genalation :  
/ usr / local / spicebin / wav2gif spice1.wav spice1.GIF  
GIF file genelation :

---

RESULT Graph ~~~~~ 1601  
RESULT DATA ~~~~~ 1602

1600

09037541-11501  
T09037541-11501

## FIG.7

EXAMPLE OF CALCULATION RESULT SCREEN  
DISPLAYED IN THE COURSE OF CALCULATION

Now Calculation !!

---

Calculation is now in progress.  
Wait for a while, and then reload this page.

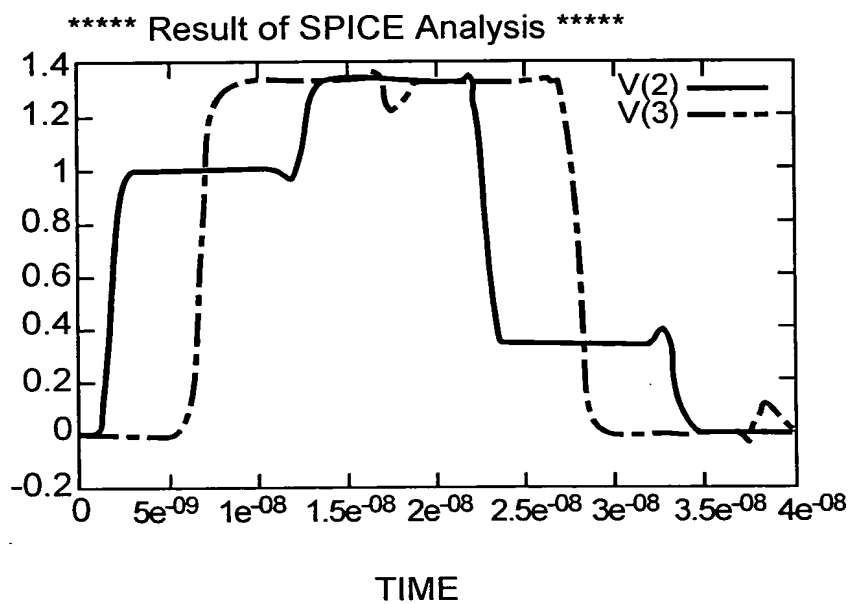
---

09987641.44504

0907041.11501

## FIG.8

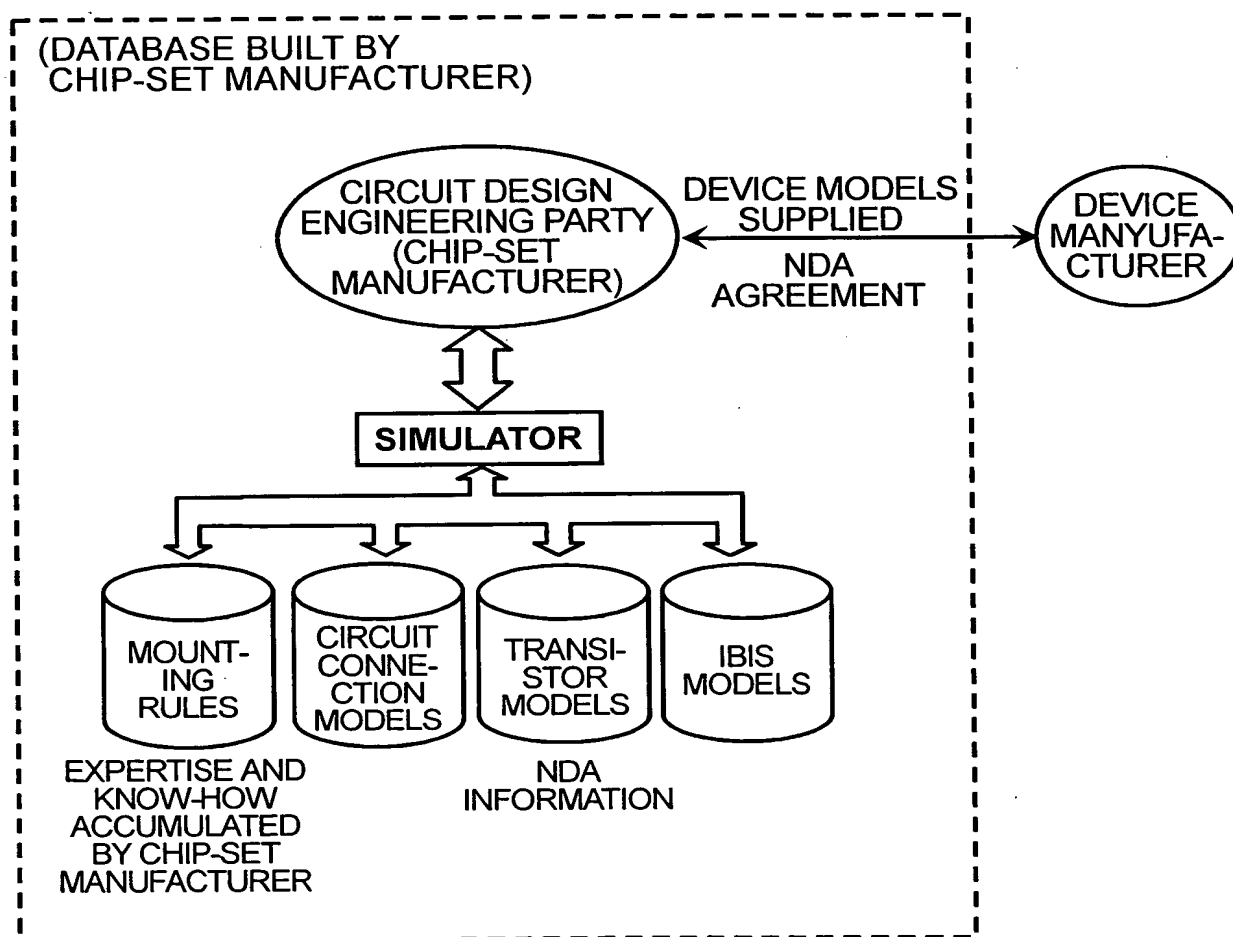
EXAMPLE OF CALCULATION RESULT  
SCREEN DISPLAYED AT THE END OF CALCULATION





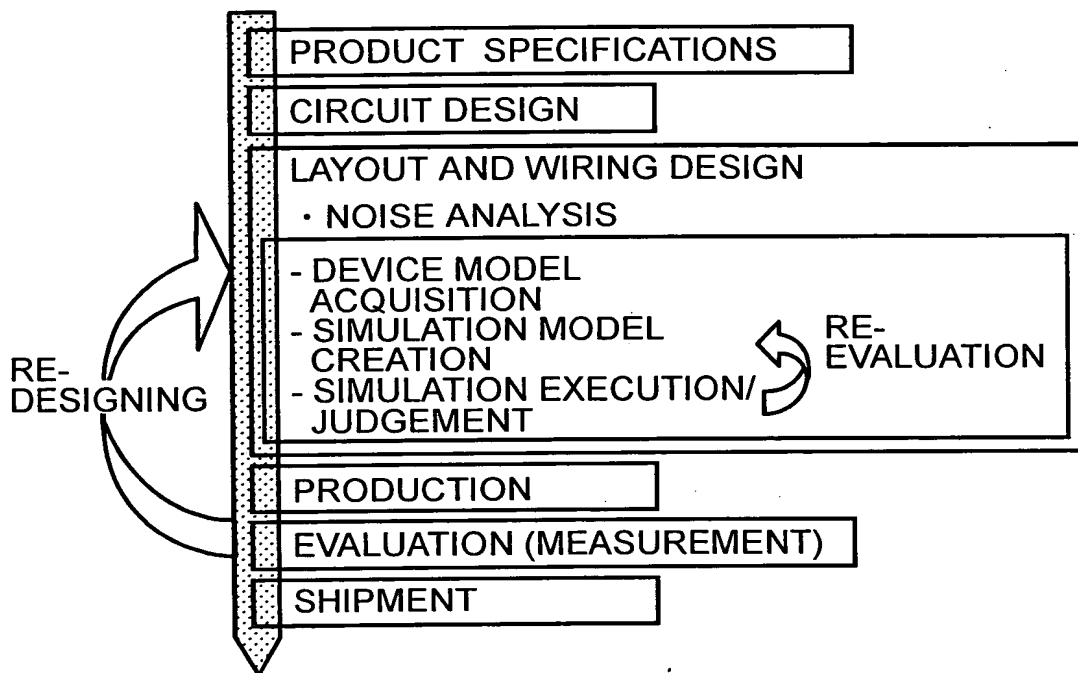
# FIG.9

## CONVENTIONAL SYSTEM CONFIGURATION

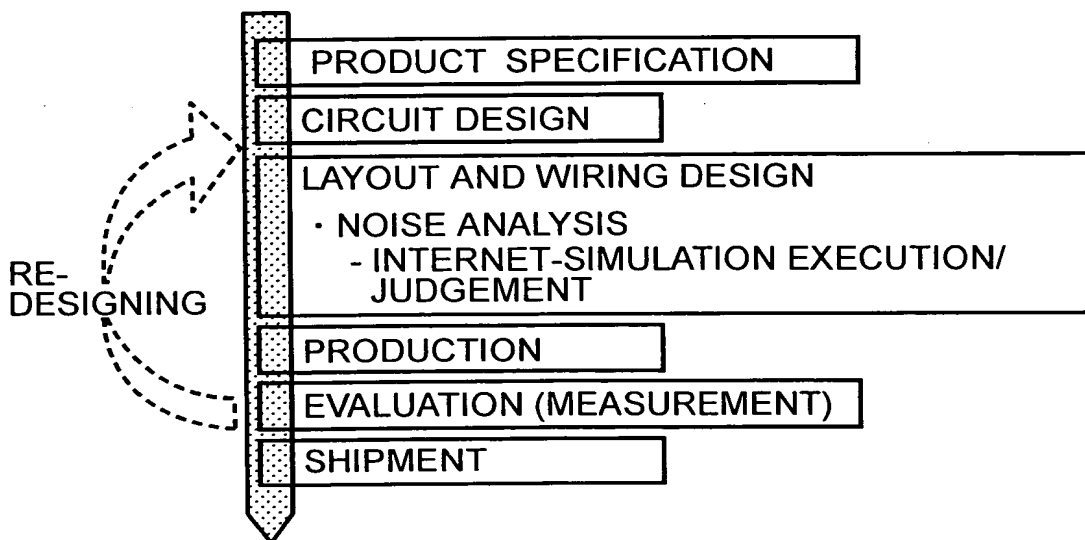


**FIG.10**

DESIGN FLOW AT CHIP-SET MANUFACTURER  
(CIRCUIT DESIGN ENGINEERING PARTY)



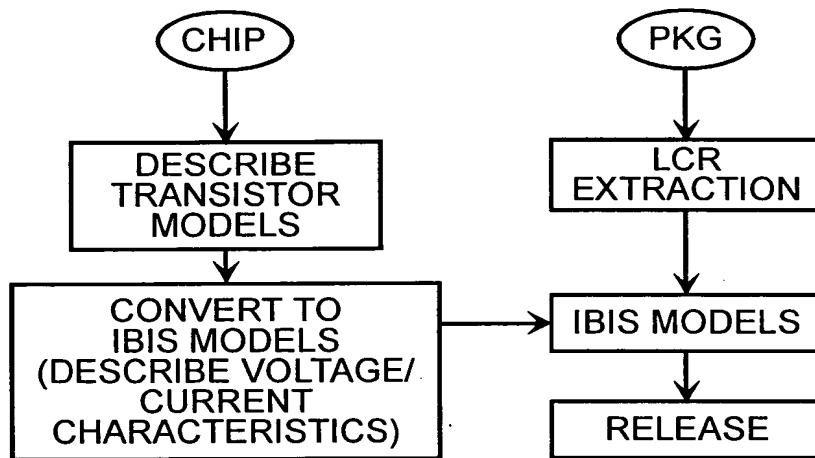
(a) CONVENTIONAL DESIGN METHOD



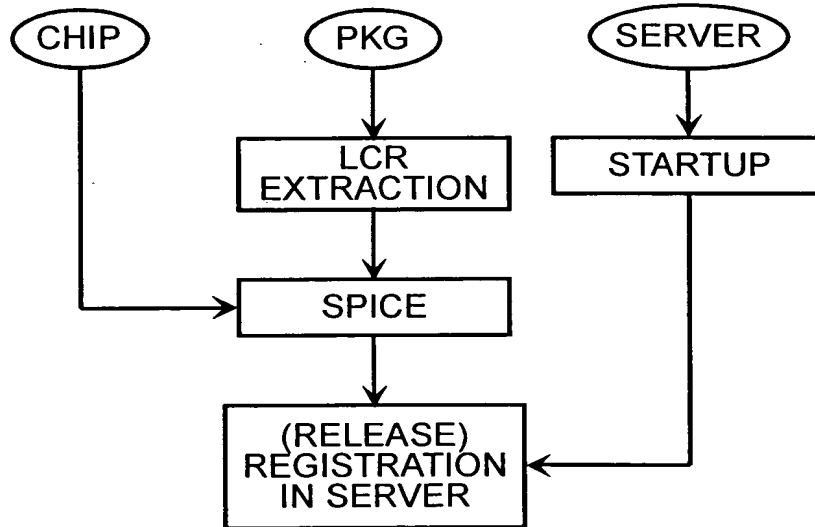
(b) DESIGN METHOD ACCORDING TO THE  
PRESENT INVENTION

**FIG.11**

MODEL PRODUCING FLOW AT MODEL SUPPLIER



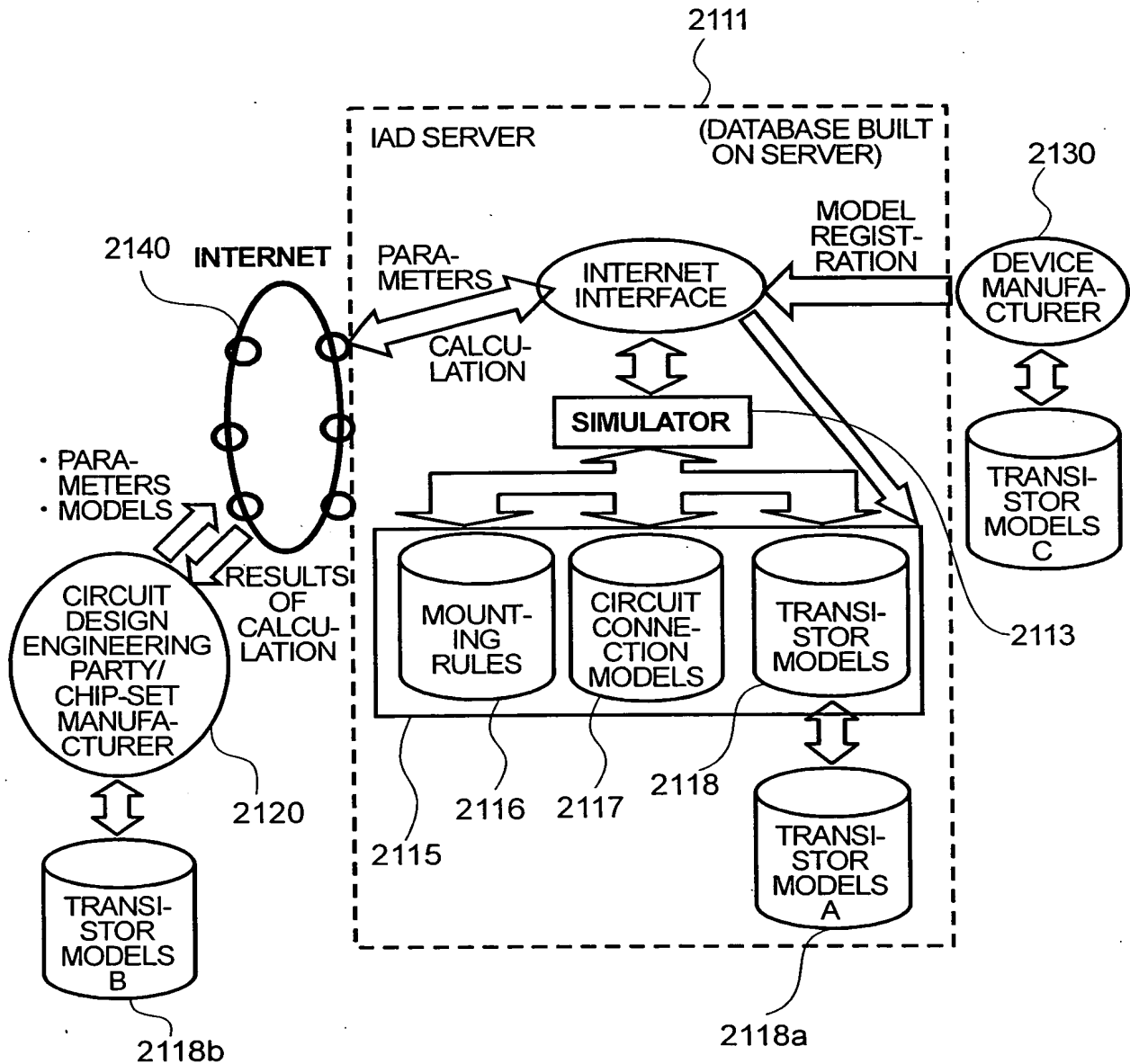
(a) CONVENTIONAL DESIGN METHOD



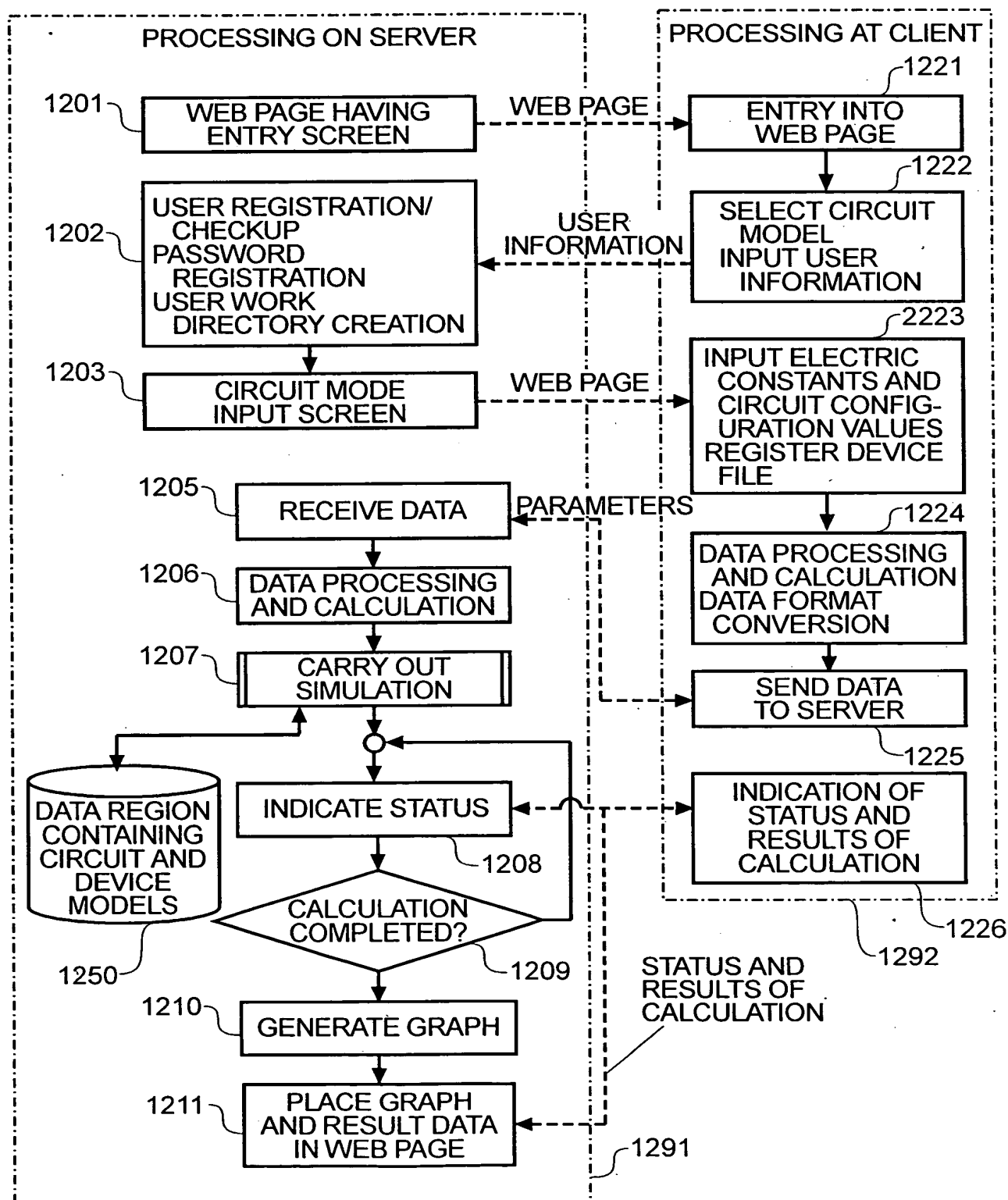
(b) DESIGN METHOD ACCORDING TO THE PRESENT INVENTION

# FIG.12

SYSTEM CONFIGURATION IN A SECOND  
PREFERRED EMBODIMENT

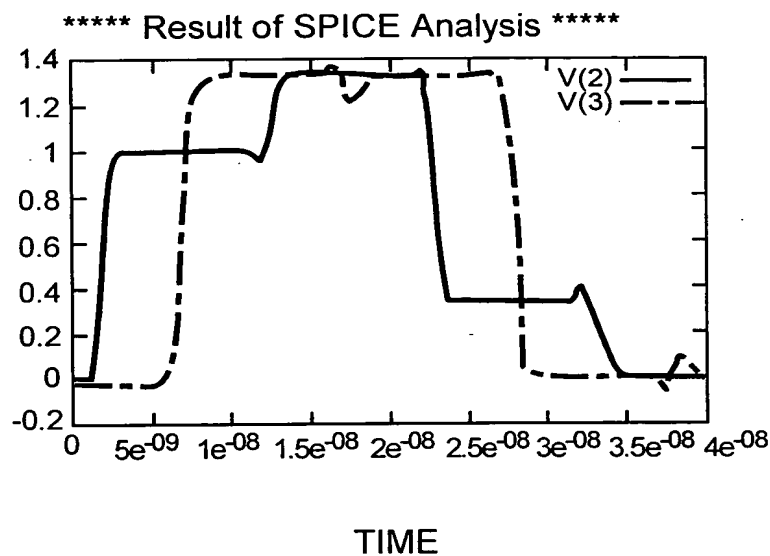


## SYSTEM OPERATION FLOWCHART

[illegible]

## FIG.14

EXAMPLE OF CALCULATION RESULT AND  
DEVICE INFORMATION SCREEN



You have selected the following device(s):

· \$H7709A, manufactured by H Ltd.

Quantity: 1 pc

Which course of action do you take?

- ☐ Call a sales engineer.
  - ☐ Check the price and delivery period.
  - ☐ Download data sheets.
- 
- ☐ Download circuit diagrams. File format: ☐ ABC format  
☐ XYZ format
  - ☐ Send circuit diagram data to a circuit boards manufacturer for requesting preparation of circuit boards.  
Circuit board manufacturer:
  - ☐ Download CAD information regarding the device.